Friday, 06/06/2008 11:01:46 AM

User:

Linda Lacelle

Customer

: CU-DAR001 Dart Helicopters Services

Job Number : 39735 **Estimate Number** : 11108

P.O. Number

This Issue Prsht Rev. : 06/06/2008

: NC

: // : 38341

Type

S.O. No. :

Part Number

**Drawing Name** 

**Process Sheet** 

: D6008180 : D6008 REV A

: X-TUBE EXTRUSION

**Drawing Number** Project Number

; N/A : A

**Drawing Revision** 

Material

**Due Date** 

: 13/09/2008

Qty:

20 Um:

Each

**Previous Run** Written By

First Issue

Checked & Approved By

Comment

: Est Rev:C 04.06.15

Added tolerance to Step 2 KJ/JLM

: PURCHASED PARTS

**Additional Product** 

Job Number:



Seq. #:

**Machine Or Operation:** 

Description:

C208/04/06 (20

1.0 PG

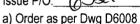


**PURCHASING** 



Comment: PURCHASING

Issue P/O: 6521



b) Material: 3.250 x 0.438 wall 7075-T6/T6511 (WW-T-700/7 or QQ-A-225/9 or QQ-A-200/11) seamless

aluminum tube

- c) Minimum ultimate tensile strength = 77 ksi
- d) Minimum tensile yield strength = 66 ksi
- e) Tolerance are per ASTM B210 (see details on Dwg D6008)
- f) Material certification required

D6008180P 2.0

Crosstube extrusion



: Total :

20.0000 Each(s)



Comment: Qty.:

1.0000 Each(s)/Unit

3.0 PACKAGING 1

Crosstube extrusion

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage

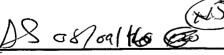
Ensure material certification is attached



4.0

QC6

DIMENSIONAL CHECK





Comment: DIMENSIONAL CHECK

Ensure Material certification comply to Dwg D6005



## Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES											
DATE	STEP		PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approva QC Inspecto					
		• .											
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		·							,				
Part No	:	PAR #	: Fault Category: _		NCR: Yes	No DQ	<b>4</b> :	Date:					
				-	OA:	N/C Close	4.	Date:					

NCR:		WORK ORDER NON-CONFORMANCE (NCR)												
		Description of NC		Corrective Action Section E	Verification	Approval								
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	Approval QC Inspector						
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NOTE: Date & initial all entries

Date: Friday, 06/06/2008 11:01:46 AM User: Linda Lacelle **Process Sheet Drawing Name: X-TUBE EXTRUSION** Customer: CU-DAR001 Dart Helicopters Services Job Number: 39735 Part Number: D6008180 Job Number: Seq. #: **Machine Or Operation** Description: HAND FINISHING1 HAND FINISHING RESOURCE #1 Comment: HAND FINISHING RESOURCE #1 Chemical Conversion Coat as per QSL005 4.1 INSPECT POWDER COAT/CHEMICAL CONVERSION 6.0 QC3 Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION 7.0 PACKAGING 1 PACKAGING RESOURCE #1 Comment: PACKAGING RESOURCE #1 Identify and Stock Location: Back QC21 FINAL INSPECTION/W/O RELEASE 8.0 Comment: FINAL INSPECTION/W/O RELEASE h 08.09.18 Job Completion 

Dart Ae	rospace L	.td								
N/O:		Page   1   1   1   1   1   1   1   1   1	W	ORK ORDER CH	ANGES					
DATE	STEP	PR	OCEDURE CH	ANGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
- Pc										
			· · · · · · · · · · · · · · · · · · ·		···					
Part No	•	PAR #:	Fault Cat	egory:	NC	R: Yes	No <b>DQ</b>	A:	_ Date:	
						QA: N	/C Close	d:	_ Date: _	····
NCR:		,	WORK ORE	ER NON-CONFO	RMANCE	(NCR	2)			
DATE	OTED	Description of NC		<b>Corrective Action</b>	Section B		Verific	cation	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Descrip Chief Eng	otion	Sign & Date	Secti		Chief Eng	QC Inspector
							i.			
					-					

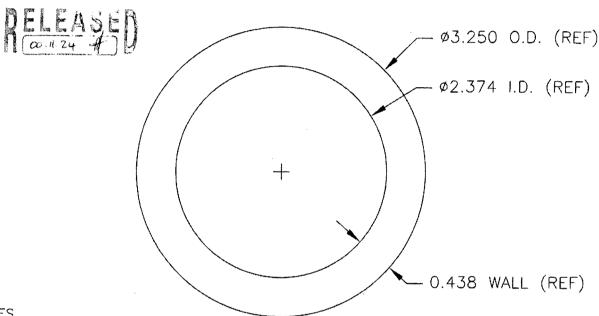
NOTE: Date & initial all entries





DESIGN (	DRAWN BY	DART AEROSPACE L HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. A
_ #	J H	D6008	SHEET 1 OF 1
DATE		TITLE	SCALE
00.11.17		CROSSTUBE MATERIAL	1:1
A	00.11.17	NEW ISSUE	

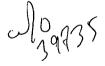
# SPECIFICATION CONTROL DRAWING



#### **NOTES**

1) D6008-XXX CROSSTUBE **LENGTH** 

WHERE XXX IS LENGTH IN INCHES EG. 180" LONG TUBE: D6008-180



2) MATERIAL:  $3.250 \text{ OD} \times 0.438 \text{ WALL } 7075-T6/T6511 \text{ (WW-T-700/7 OR QQ-A-225/9 OR } 1.000 \text{ OR } 1.0000 \text{ OR } 1.0000 \text{ OR } 1.0000 \text{ OR } 1.0000 \text{ OR } 1.$ QQ-A-200/11) SEAMLESS ALUMINUM TUBE. MINIMUM ULTIMATE TENSILE STRENGTH = 77 ksi

MINIMUM YIELD TENSILE STRENGTH = 66 ksi

3) TOLERANCES ARE PER ASTM B210 AS FOLLOWS:

O.D.: ± 0.008 MEAN (±0.016 INCLUDING OVALITY) WALL: ±0.020 MEAN (±0.044 INCLUDING ECCENTRICITY)

XXX +0.125/-0.000 LENGTH:

- STRAIGHTNESS: 0.010" DEVIATION / 12" LENGTH
  4) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 5) CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

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## **Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES											
DATE	STEP	PR	OCEDURE CHANGE	E	By Date	e Qty	Approval Chief Eng / Prod Mgr	Approva QC Inspecto					
_			<b>7</b>										
Part No	•	PAR #:	Fault Category:	NCR:	Yes No	DQA:	Date: _						
				d	A: N/C CIG	sed:	_ Date: _						
NCR:		,	WORK ORDER NON-CON	IFORMANCE (	NCR)		·······						

NCR:		<b>\</b>	WORK ORDER NON-CONFORMANCE (NCR)											
		Description of NC		Corrective Action Section B		Verification	Approval							
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	Approval QC Inspector						
							17							
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NOTE: Date & initial all entries



# Abnahmeprüfzeugnis 3.1 - EN 10204:2004

Inspection Certificate 3.1 - EN 10204:2004 | Certificat de Reception 3.1- EN 10204:2064

Kunde:

Dart Aerospace Ltd.

Zeugnisnummer:

1285/08

Client:

1270 Aberdeen Street

Cert No.: / No. du certificat:

Hawkesbury, ON

Bestellnummer:

PO 00006521

Produkt:

K6A1K7 Rohre nahtlos gepresst Order No. / No. de commande

29893/2

Product / Produit:

Auftraq:

Tubes seamless extruded

Our Reference/Notre Reference:

Spezifikation:

-; AMS - QQ - A - 200/11E; -; -; Spezifikation Dart Aerospace D6008

Specification:

T 6511

Werkstoff: Alloy/Alliage:

7075

Zustand:

Temper/État

Abmessung Size / Dimension 3,250 INCH

x 2,374 INCH x 0,438 INCH x 180,000 INCH

Canada

D6008-180 3.250 x 0.438 x 180

Kennzeichnung

ALUnna - Cert No. 1285/08 - 7075 - T6511 - Cast No. 81742 - AMS - QQ - A - 200/11 - 3.250" OD X 0.438" Wall -Heat Lot No. 1837 - ALUnna Order Conf. 29893/2-1 - P.O.00006521

Marking/Marquage:

Stück

kq

Lieferung Delivered Material / Matérial délivre:

484,00

Chemical Analysis / analyse chimique 1. Chemische Analyse

		Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Zr	Bi	Sn	:4
Cnarge/	min.			1,2		2,1	0,18	5,1						
Cast No.	max.	0,40	0,50	2,0	0,30	2,9	0,28	6,1	0,20					
81742		0,07	0,13	1,38	0,04	2,45	0,19	5,73	0,04	0,01	0,03	0,01	0,01	0,01

2. Mechanische Eigenschaften

Mechanical Properties / Valeurs Mécaniques

Requirements (Rm min. 77 max.	nsile yield		i	1	
1 87,	n) ksi (Rp0,2) ksi	elongation 2" %	elongation A %	Hardness HB	Heat Lot itc.
	7,0 66,0				
	,000 81,490 ,420 79,895	8,0 8,0	obloali	158 157	1837 - 15 pcs.

RMS: outside 25 - max. 6,62 μ"

Ergebnis der Prüfungen:

Es wird bestätigt, daß die Lieferung geprüft wurde und den Vereinbarungen bei der Bestellannahme entspricht

Test results: Resultats:

We confirm that the delivery has been tested and applies to the agreements made on receipt of the order Nous confirmons que la livraison a été controlée et correspond avec les conventions faites à la réception de la commande

21.08.2008

/ Duda

Certified acc. DIN EN ISO 9001:2000 and DIN EN 9100:2003 valid until 2010-11-11

Cert.- Reg. No.: 001959 QM; 001959 ASH

Aluminiumwerk Unna AG, Uelzener Weg 36, 59425 Unna, Germany

ALUMINA Abnahmebeauftracter American Aldrews Act

PO. 00006521

Uma ran no.
29893/2

ie: 08.21.08

Boxmarking:

Dart Aerospace PO. 00006521

Made in Germany

Dest.: Hawkesbury Ont. Canada

hereby declare that the wooden packing material ar	re totally free from bark and apparently
--	--

e nom n	ve plant p	(3.5	гТ	Wall	T						Boxdimensid	
em no.	Box no.	OD (inch)		(inch)	Net Weight (lbs)	Tare lbs	Gross Weight	Pleces	lengths (ft)	Longths (inch)	Width	height (inch
2	11	3,250	0,50	0,438	1067	66	1133	15	15		(inch)	113.311 (111611
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				L	1067	66	1133	15				,81 m³

Sportion



## MEDITERRANEAN SHIPPING COMPANY (CANADA) Inc

Date: 9/15/2008 Time: 9:12:01AM

360, St. Jacques Street, Suite 900, Montreal Phone: +1 514 844 3711 Fax: +1 514 844 4272

### **Delivery Order**

TO THE	ATTENTION OF	

### TRANSPEL

205 CHEMIN DU TREMBLAY

	205 CINDIVILLED TILLIAM	
Deliver Container To:	DART AEROSPACE	Consignee: TRANSWORLD SHIPPING USA INC.
	1270 ABERDEEN ST. Hawkesbury, ON K6A 1K7	Drop Off EMPTY At:
Contact: Telephone:	LINDA LACELLE 613-632-9577	Scheduled Appointment:  TOFC / COFC: COFC  Live Unload: Yes
		Comments:
Pick Up At:	Montreal, QC - (.) - TERMONT	PLEASE CALL BEFORE DELIVERY
Vessel / Voyage:	MSC SERENA / 56A	
Port Of Load:	Bremerhaven, HB, Germany	
Port Of Discharge:	Montreal, QC	

Please pickup the following container(s):

CONTAINER TYPE	CONTAINER NUMBER SEAL NUMBER LAST FREE DATE	B/L NUMBER SHIPPER REFERENCE PICK UP NUMBER	WEIGHT	NUMBER of PACKAGES  COMMODITY  HAZARDOUS INFORMATION	PACKAGE TYPE
40' High Cube	MSCU7564400	MSCUHB332602	5,629 kgs.	9	Box(es)
40 Tigh Cube	W219833		BOXES ALU TUBES HS CODE: 760820811		
	W217033	43593723	FREIGHT + ONCARRIAGE PREPAID		
	1	1997913	WAYBILL STRAIGHT CONSIGNMENT		
			AUTOMATIC CARGORELEASE ACI		
			INFORMATIO	N: ACI SUB-MITTED	AND
			PROCESSED BY TRANSWORLD SHIPPING		
*			UNDER CBSA CODE:8U22106080573500		
			Non-Hazardous	<u> </u>	

Total	Weight	



#### Une société de Transforce

Téléphone: 450 641-9051 fax: 641-9247

 ${\bf 4}$ , Chemin du Tremblay. Boucherville (Québec) J4B 6Z5

www.transpel.ca

D - 178031

Date: 09/15/2008 Facture A./Billed to : MSC S/S Stemship to LTD								
Tracteur Chassis Chassis Remorque Trailer		Chaufeur Driver		Date de livraison Heure de li date of delivery Time of d				
24304	82480/2027	ROBERT CHRISTIAN		09/16/2008	8:00			
Full	X Empty	ELECTION 1	# VI oile					
	éditeur/Shipper 💢 🦥	Disponible à / Available	itusette <b>s</b> D	Date & theure de ramassag	e/Date & time pickup			
MSC 360 St-Jacque	es suite 900	TERMONT°TER001		09/15/20	008			
MONTREAL, PQ CA H2Y 3X1		Booking						
		MSCUHB332602		MSC SERENA 56A				
ler Consi	gnataire / 1st Consignee	Conteneur / Container #	a protest a	Taille /	líze			
DART AEROSPACE 1270 ABERDEEN STREET HAWKESBURY, ON		MSCU7564400		40 HC				
		# de Sceau // Seal #	at the same of	Poids / Weight				
		<b>319833</b> 12409		)				
2è Consig	nataire/2nd Consignee	#Conteneur/Container	# 18 15 18 M	Taille//S	ize			
TRANSTERN	•							
7600 NOTRE DAME OUEST IONTREAL , PQ		Port de / of destination		* P/U-Vil	lews and the second			
н4С 3К4								
514-368-1482								
1 raverse dodani	ère et courtier Border crossing and	broken: Heure d'arrivée / Time of 2.30	Arrival 3	Fleure de depart /-1 in	e of departure			
		Remarque / Remark						
P/U# 4359372		Remarque / Remark	<u></u>					
F/U# 43393/2								
UN#E		Matières dangeureuses / Hazaro	lous materia	Is to CEASS to 1				
		NOTE AU CLIENT / NOTE TO	CUSTOME	2				
ASSUREZ-VOUS QUE LE SCEAU EST INTACT À LA LIVRAISON / ENSURE SEAL IS INTACT AT TIME OF DELIVERY								
AUCUNE RÉCLAMATION NE SERA ACCEPTÉE SANS AVIS AU MOMENTT DE LA LIVRAISON NO CLAIM WILL BE ACCEPTED UNLESS REPORTED AT TIME OF DELIVERY								
Exceptions:								
	Imprimez client/print cu	stomer	and the second	Signature 🕮	<b>24.</b> - 2 2 3 3 3 3 3 3.			
	Imprimez chauffeur///prin	driver.	tale Properties	Signature -				
CHA	RISTEN ROTAT		history	a Pare				
OLIT TEMPS DI	TTENTE CHEZ CE CLUENT DEL	/DA ÊTDE CIONÉ DAD LE CLIENT ETRA	OF DAIL FERRINGS					

PAS PAYÉ. VOUS DEVEZ AUSSI EN TOUT TEMPS, RAPPORTER LA FORMULE DU CLIENT (FEUILLE DE DÉTAILS DU VOYAGE 8,5 X 11")
PREUVE DE RÉCEPTION (SIGNATURE OU ESTAMPE)

COPIE DU CHAUFFEUR / DRIVER'S COPY